

Work Order ID 75890

75890

Page 1

November-01-11 1:12:58 PM

Item ID: D412-630-031 Accept *N9000040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Pilot/Co-Pilot Step, LH (Folding)
 Start Date: 01/11/2011 Start Qty: 1.00 *1* Cust Item ID:
 Required Date: 15/11/2011 Req'd Qty: 1.00 *1* Customer:
 Reference:

Approvals: Process Plan: M.L.J Date: 11/11/01 Tooling: _____ Date: _____ Run Start *NR1*
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
IIN D412-630	Rev M

100 0.00
 100 DOCUMENT CONTROL
 DC Memo 0.00
 Document Control Photocopy D412-630 bluefile & type labels per PPP412-630-031 CHG003

110 0.00
 110 Small Fab
 Small Fab Memo 0.00
 Small Fab Assemble as per dwg D412-630 p.17
 ****ensure tension to retract step is 11 to 18 lbs before installing lockwire.****

120 0.00
 120 QC5- Inspect part completeness to step on W/O
 QC Memo 0.00
 Quality Control ****ensure tension to retract step is 11 to 18 lbs ****

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 75890

75890

Page 2

November-01-11 1:12:58 PM

Item ID: D412-630-031 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Pilot/Co-Pilot Step, LH (Folding)
 Start Date: 01/11/2011 Start Qty: 1.00 ***1*** Cust Item ID:
 Required Date: 15/11/2011 Req'd Qty: 1.00 ***1*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Pick Kit	0.00							
130						1X			SP
Packaging	Memo	0.00							12-10-24
Packaging									
140	QC4- 100% Inspect kits for completeness	0.00							
140									
QC	Memo	0.00							
Quality Control									
150		0.00							
150									
Packaging	Packaging	0.00							
Packaging	Memo								
Packaging	Identify and pack for shipping as per PPP D412-630-031								
	Location: <u>B8</u>								
	PPP Rev: <u>5</u>								

DA
1E
QC

12/10/25

XL
LH

SP

SL 12/10/25

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 75890***75890***

Page 3

November-01-11 1:12:58 PM

Item ID: D412-630-031

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Pilot/Co-Pilot Step, LH (Folding)

Start Date: 01/11/2011 Start Qty: 1.00

1

Cust Item ID:

Required Date: 15/11/2011 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start

NR1

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

160

QC21- Final Inspection - Work Order Release

0.00

160

QC

Memo

0.00

Quality Control

MLJ 12-10-26

U 12.10.26

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

November-01-11 1:13:02 PM

75890

D412-630-031

Required Date: 15/11/2011

Required Qty: 1.00

Comments:	IPP REV. A	05.11.21	NEW ISSUE	EC	
	IPP REV. B	05.12.19	updated pick list	EC	
	IPP REV. C	07.11.12	ecn 1019,no chg	EC	verified by DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
AN310-4 *AN310-4* NUT		Purchased	No			130	Each	41.0000	1	1			
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				ST324		19							
					118983	19							
				ST344		22							
					119328	22							
AN310-5 *AN310-5* NUT		Purchased	No			130	Each	30.0000	2	2			
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				ST324		30							
					118112	30							
AN3C5A *AN3C5A* Bolt		Purchased	No			130	Each	1,134.000	3	3			
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				FP-A		7							
					115835	7							
				ST350		1127							
					116419	28							
					117343	17							
					117764	169							
					117872	2							
					118451	411							
					119127	500							

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Page 2

November-01-11 1:13:02 PM

Work Order ID: 75890

75890

Parent Item: D412-630-031

D412-630-031

Parent Item Name: Pilot/Co-Pilot Step, LH (Folding)

Start Date: 01/11/2011

Required Date: 15/11/2011

Start Qty: 1.00

Required Qty: 1.00

AN44-C12

Purchased

No

130

Each

10.0000

** 0 1

m120139 sp L
SMB

AN44-C12
eyebolt

Location

Loc Qty

Loc Code

ST362

10

117616

10

AN4C15

Purchased

No

130

Each

15.0000

** 0 1

m121146 sp L
SMB

AN4C15
BOLT

Location

Loc Qty

Loc Code

ST358

15

118652

15

AN5C11

Purchased

No

130

Each

20.0000

** 0 1

m120139 sp C
SMB

AN5C11
BOLT

Location

Loc Qty

Loc Code

ST337

20

114801

20

AN5C15

Purchased

No

130

Each

14.0000

** 0 1

m120139 sp L

AN5C15
BOLT

Location

Loc Qty

Loc Code

ST338

14

117616

14

AN960C516

Purchased

No

130

Each

18.0000

** 0 1

m117460
SP12-10-4
SMB

AN960C516
WASHER

11490503R

Location

Loc Qty

Loc Code

ST344

18

102842

18

November-01-11 1:13:02 PM

Shop Packet Print

Page 2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Page 3

November-01-11 1:13:02 PM

Work Order ID: 75890

75890

Parent Item: D412-630-031

D412-630-031

Parent Item Name: Pilot/Co-Pilot Step, LH (Folding)

Start Date: 01/11/2011

Required Date: 15/11/2011

Start Qty: 1.00

Required Qty: 1.00

D3454-1

Manufactured No

130

Each

27.0000

D3454-1
Bushing

**

B82359 SP C

Location

Loc Qty

Loc Code

ST054

27

58555

7

74730

20

Smb

D3454-3

Manufactured No

130

Each

24.0000

D3454-3
Bushing

**

B8341 SP C
88603

Location

Loc Qty

Loc Code

ST054

24

68467

4

73348

20

Smb

D3454-5

Manufactured No

130

Each

26.0000

D3454-5
Bushing

**

B82159 SP C

Location

Loc Qty

Loc Code

ST054

26

70527

6

73343

20

Smb

D3455-1

Manufactured No

130

Each

39.0000

D3455-1
Spacer

**

B87286 SP C
12-104

Location

Loc Qty

Loc Code

ST054

39

73302

39

Smb

November-01-11 1:13:02 PM

Shop Packet Print

Page 3

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Page 4

November-01-11 1:13:02 PM

Work Order ID: 75890

75890

Parent Item: D412-630-031

D412-630-031

Parent Item Name: Pilot/Co-Pilot Step, LH (Folding)

Start Date: 01/11/2011

Required Date: 15/11/2011

Start Qty: 1.00

Required Qty: 1.00

D3455-3

Manufactured No

130 Each

18.0000

**

B83211 SP C

D3455-3
Spacer

Location

Loc Qty

Loc Code

ST054

18

68470

1

72163

17

Sms

D3462-041

Manufactured No

130 Each

2.0000

**

B78195 SP C

D3462-041
Bracket Assembly

Location

Loc Qty

Loc Code

ST198A

2

72030

2

Sms

MS21043-3

Purchased No

130 Each

730.0000

**

M122993 SP C

MS21043-3
Nut

Location

Loc Qty

Loc Code

FG

72

103691

72

ST301

658

118077

1

118614

477

118686

180

Sms

MS24665-227

Purchased No

130 Each

83.0000

**

M120124 SP C

MS24665-227
COTTER PIN

Location

Loc Qty

Loc Code

GA

83

111041

83

12-10-4.

Sms

November-01-11 1:13:02 PM

Shop Packet Print

Page 4

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Page 5

November-01-11 1:13:02 PM

Work Order ID: 75890

75890

Parent Item: D412-630-031

D412-630-031

Parent Item Name: Pilot/Co-Pilot Step, LH (Folding)

Start Date: 01/11/2011

Required Date: 15/11/2011

Start Qty: 1.00

Required Qty: 1.00

MS24665-229

Purchased

No

130

Each

297.0000

2

2

MS24665-229
COTTER PIN

**

SP

SMRS

Location

Loc Qty

Loc Code

GA

195

118234

195

ST309

102

111041

102

2x

NAS1149C0363R

Purchased

No

130

Each

3,906.000

7

7

NAS1149C0363R
Washer

**

SP

h

Location

Loc Qty

Loc Code

ST297

3906

114742

3906

NAS1515H5

Purchased

No

130

Each

163.0000

1

1

NAS1515H5
Washer

**

7x

SMR

M/20/49 SP. h

Location

Loc Qty

Loc Code

FG

40

103286

20

103691

20

ST277

123

103286

100

118384

23

SMR

D3463-041

Manufactured

No

110

Each

1.0000

0

1

D3463-041
Step Weldment Assembly

**

SP 12/10/23

Location

Loc Qty

Loc Code

ST494

1

72201

1

B 79037

November-01-11 1:13:02 PM

Shop Packet Print

Page 5

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Page 6

November-01-11 1:13:02 PM

Work Order ID: 75890

75890

Parent Item: D412-630-031

D412-630-031

Parent Item Name: Pilot/Co-Pilot Step, LH (Folding)

Start Date: 01/11/2011

Required Date: 15/11/2011

Start Qty: 1.00

Required Qty: 1.00

D3443-043
D3443-043
Strut Weldment Assembly

Manufactured No

110

Each

1.0000

1

1

**

12/10/23
B77006 (u)

Location

Loc Qty

Loc Code

ST198A

1

70525

1

D3443-041
D3443-041
Strut Weldment Assembly

Manufactured No

110

Each

0.0000

1

1

**

78188

~~B85905 SP~~

D3443-9
D3443-9
Pin

Manufactured No

110

Each

10.0000

2

2

**

Location

Loc Qty

Loc Code

ST054

10

72029

2

74699

8

D3454-7
D3454-7
Bushing

Manufactured No

110

Each

26.0000

2

2

**

B82157 SP

Location

Loc Qty

Loc Code

ST054

20

73346

20

ST058

6

70528

6

D3455-1
D3455-1
Spacer

Manufactured No

110

Each

39.0000

2

2

**

B87286 SP
12-10-4

Location

Loc Qty

Loc Code

ST054

39

73302

39

November-01-11 1:13:03 PM

Shop Packet Print

Page 6

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Page 7

November-01-11 1:13:03 PM

Work Order ID: 75890

75890

Parent Item: D412-630-031

D412-630-031

Parent Item Name: Pilot/Co-Pilot Step, LH (Folding)

Start Date: 01/11/2011

Required Date: 15/11/2011

Start Qty: 1.00

Required Qty: 1.00

D3465-1

Manufactured No

110

Each

24.0000

1

1

D3465-1

Washer

**

B78197 SP

Location

Loc Qty

Loc Code

ST054

24

46134

4

73449

20

AN4CH3

Purchased No

110

Each

34.0000

2

2

AN4CH3

SS Bolt

**

M120139 SP

Location

Loc Qty

Loc Code

ST357

34

117616

1

118131

3

118757

10

118758

20

AN4C14

Purchased No

110

Each

25.0000

1

1

AN4C14

BOLT

**

M120141 SP

Location

Loc Qty

Loc Code

ST357

25

117688

25

AN310-4

Purchased No

110

Each

41.0000

1

1

AN310-4

NUT

**

M122800 SP

Location

Loc Qty

Loc Code

ST324

19

118983

19

ST344

22

119328

22

November-01-11 1:13:03 PM

Shop Packet Print

Page 7

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

November-01-11 1:13:03 PM

Work Order ID: 75890

75890

Parent Item: D412-630-031

D412-630-031

Parent Item Name: Pilot/Co-Pilot Step, LH (Folding)

Start Date: 01/11/2011

Required Date: 15/11/2011

Start Qty: 1.00

Required Qty: 1.00

AN310-7

Purchased

No

110

Each

27.0000

1

1

AN310-7

NUT

**

m 119749 SP

Location

Loc Qty

Loc Code

ST324

27

114784

27

MS24665-227

Purchased

No

110

Each

83.0000

1

1

MS24665-227

COTTER PIN

**

m 120124 SP

Location

Loc Qty

Loc Code

GA

83

111041

83

MS24665-302

Purchased

No

110

Each

114.0000

1

1

MS24665-302

Cotter Pin

**

m 120521 SP

Location

Loc Qty

Loc Code

ST357

114

117460

114

12-10-4.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

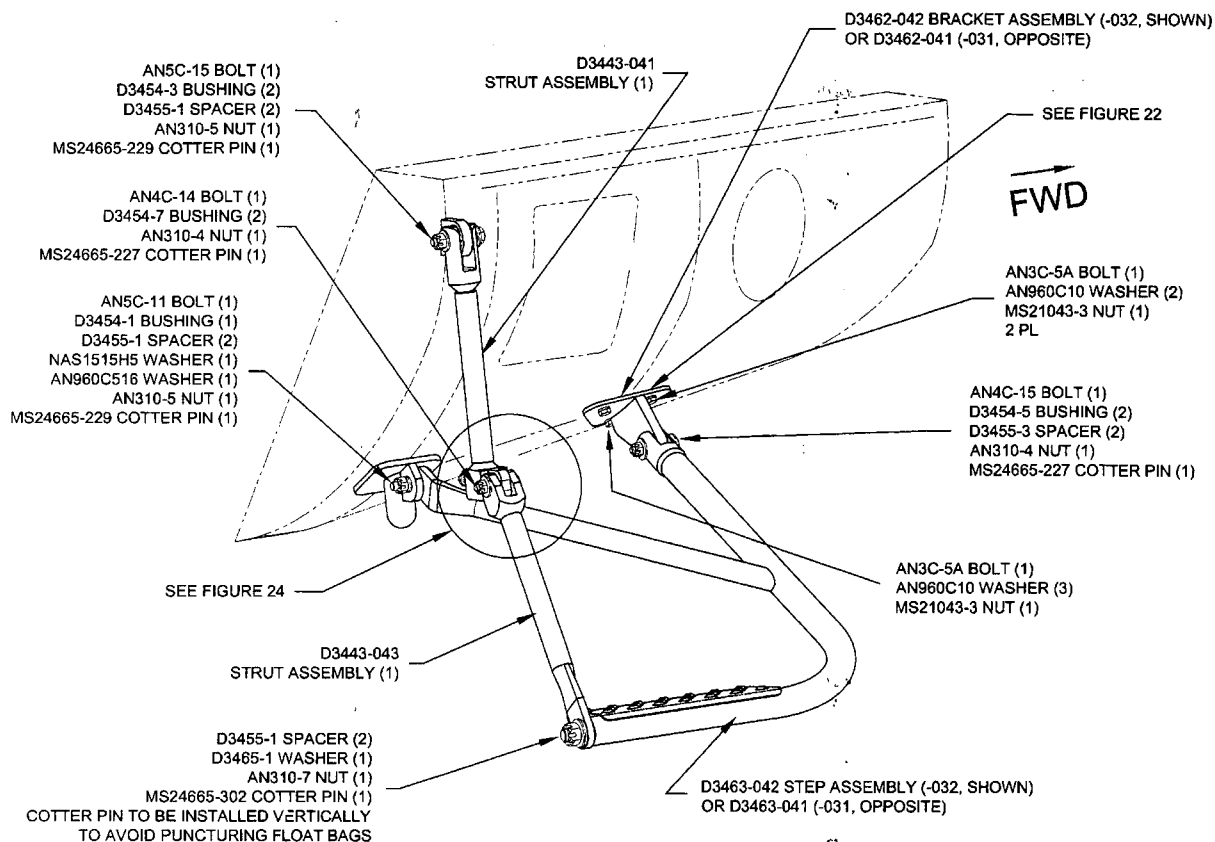


FIGURE 23 – Isometric View D412-630-032 RH, Pilot/Co-Pilot Folding-Step Installation (Shown)
D412-630-031 LH (Opposite)

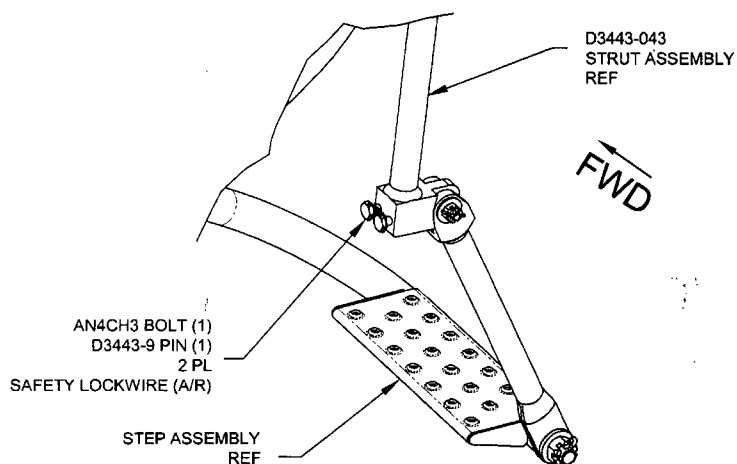


FIGURE 24 – Detail Safety Wiring, D412-630-032 RH, Pilot/Co-Pilot Folding-Step Installation (Shown)
D412-630-031 LH (Opposite)

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Revision: **M**
Date: 08.12.12

REFERENCE ONLY

SMD

DART AEROSPACE LTD.

D412-630
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Qty 031	Qty 032	Part Number	Description
X		D412-630-031	PILOT/CO-PILOT STEP, LH (FOLDING)
	X	D412-630-032	PILOT/CO-PILOT STEP, RH (FOLDING)
1	1	D3443-041	STRUT ASSEMBLY
1	1	D3443-043	STRUT ASSEMBLY
2	2	D3443-9	PIN
1	1	D3454-1	BUSHING
2	2	D3454-3	BUSHING
2	2	D3454-5	BUSHING
2	2	D3454-7	BUSHING
6	6	D3455-1	SPACER
2	2	D3455-3	SPACER
1	1	D3462-041	BRACKET-ASSEMBLY
	1	D3462-042	BRACKET ASSEMBLY
1	1	D3463-041	STEP ASSEMBLY
	1	D3463-042	STEP ASSEMBLY
1	1	D3465-1	WASHER
2	2	AN310-4	NUT
2	2	AN310-5	NUT
1	1	AN310-7	NUT
3	3	AN3C-5A	BOLT
1	1	AN44-C12	EYEBOLT
1	1	AN4C14	BOLT
1	1	AN4C15	BOLT
2	2	AN4CH3	BOLT
1	1	AN5C11	BOLT
1	1	AN5C15	BOLT
7	7	AN960C10	WASHER
1	1	AN960C516	WASHER
3	3	MS21043-3	NUT
2	2	MS24665-227	COTTER-PIN
2	2	MS24665-229	COTTER-PIN
1	1	MS24665-302	COTTER-PIN
1	1	NAS1515H5	WASHER

* USE AN44-C12 EYEBOLT WHEN D412-630-031/-032 IS INSTALLED IN CONJUNCTION WITH D412-630-023/-024/-033/-034TM HELI-ACCESS-STEP

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Revision: **M**
Date: 08.12.12